I claim:

1. A spore detection cell comprising:

   a. An expanded fluorocarbon tube,

   b. An optical fitting connected to each end of said expanded fluorocarbon tube as a means of passing radiation through the said expanded fluorocarbon tube,

   c. A chamber for the attachment of said optical fittings,

   d. Means of introducing air into the interior of the said expanded fluorocarbon tube,

   e. Means of introducing reagent into the interior of said expanded fluorocarbon tube.

2. A spore detection cell of Claim 1 with only one said optical fitting for introducing and receiving radiation of the said expanded fluorocarbon tube.

3. A spore detection cell comprising:

   a. An expanded fluorocarbon tube,

   b. An optical fitting connected to each end of said expanded fluorocarbon tube as a means of passing radiation through the said expanded fluorocarbon tube,

c. Means of introducing air into the interior of the said expanded fluorocarbon tube,

d. Means of introducing reagent into the interior of said expanded fluorocarbon tube,

e. Means of vacating the reagent from the interior of said expanded fluorocarbon tube.

4. A spore detection cell of Claim 3 with only one said optical fitting for introducing and receiving radiation of the said expanded fluorocarbon tubing.

5. A method of detecting spores of a bacillus extracting and analyzing pyridine-2,6-dipicolinic acid, the method comprising the steps of:

Combining a gem chlorinated hydrocarbon with a hindered nitrogen base and reacting the mixture with pyridine-2,6-dipicolinic acid to form a reaction product and detecting one of the products of the reaction with molecular fluorescence or absorbance.

6. The method of Claim 5 wherein the said gem polychlorinated hydrocarbon is selected from a group consisting of trichloroethene, chloroform or bromoform.

7. The method of Claim 5 wherein the said hindered nitrogen base is selected from a group consisting of tetraethylammonium hydroxide, tetrapropyl ammonium hydroxide, tetrabutylammonium hydroxide.

8. The method of Claim 5 wherein the base is selected from a group consisting of thiophenoxide or other phenoxides.

9. The method of Claim 5 wherein an organic base modifer is added to the reagent from a group consisting of pyrimidine or a derivative such as hexahydro pyrimido pyrimidine, hexahydro methyl pyrimido pyrimidine. Other modifiers include nitrogen heterocyclic compound including acetaldehydeammonium trimer, 1,5-diazabicyclo [4.3.0] non-5-ene, 1,4-diazabicyclo [2.2.2] octane, 1,8-diazabicyclo [5.4.0] undec-7-ene.